UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,739	10/10/2006	Yuepeng Chen	30952/41851	9748

4743 7590 10/07/2008

MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

EXAMINER	
HO, CHUONG T	
ART UNIT	**PAPER NUMBER**
2419	

MAIL DATE	DELIVERY MODE
10/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,739	CHEN ET AL.	
	Examiner	Art Unit	
	CHUONG T. HO	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/22/07, 02/01/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The preliminary amendment filed 02/01/06 entered and made of record.

2. Claims 1-20 are pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 10/22/07, 02/01/06 was filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 6, 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (Pub. No.: US 2002/0147828 A1) in view of Oyama et al. (Patent No.: US 7,106,718 B2).

Regarding to claim 1, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing creating a QoS connection between bearer network resource managers in the communication network; according to the QoS information sent by a respective bearer network resource manager of the bearer network resource managers, a connection node connected to the respective bearer network resource manager providing corresponding resource

Oyama '718" disclose creating a QoS connection (col.22, lines 1-5 wherein the pre-established signaling QoS is not determined or negotiated during during set of the session) between bearer network resource managers in the communication network; according to the QoS information sent by a respective bearer network resource manager of the bearer network resource managers, a connection node connected to the respective bearer network resource manager providing corresponding resource (figure 15, col. 13, lines 53 – col. 14, lines -40, QoS signaling request 2, QoS signaling accept 11) (col.3, lines 60-67, a bearer is a logical connection between two entities)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling

QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 2, Chen '828' disclose the limitations of claim 1 above.
However, Chen '828' are silent wherein the bearer network resource manager is located in a bearer control layer of a multiservice network.
Oyama '718' disclose wherein the bearer network resource manager is located in a bearer control layer of a multiservice network (figure 11, access network bearer control located a bearer control)
Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 3, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing a local bearer network resource manager that initiates a create connection procedure sending an establish connection

request to a peer bearer network resource manager; and the. peer bearer network resource manager responding to the establish_connection request and creating the QoS connection

Oyama '718' disclose a local bearer network resource manager that initiates a create connection (figure 15, connection establishment) procedure sending an_establish connection request to a_peer bearer network resource manager; and the. peer bearer network resource manager responding to the establish_connection request and creating the QoS connection (col.22, lines 1-5 wherein the pre-established signaling QoS is not determined or negotiated during during set of the session) (figure 15, QoS signaling request 5, QoS signaling accept 11).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 6, Chen '828' disclose exchanging_and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen ‘828' are silent to disclosing the local bearer network resource manager periodically sending a handshake message to the peer bearer network resource manager, and determining a connection status according to a handshake response returned by the peer bearer network resource manager .

Oyama ‘718’ disclose the local bearer network resource manager periodically sending a handshake message to the peer bearer network resource manager, and determining a connection status according to a handshake response returned by the peer bearer network resource manager (figure 15, connection establishment) (col.22, lines 1-5 wherein the pre-established signaling QoS is not determined or negotiated during during set of the session) (figure 15, QoS signaling request 5, QoS signaling accept 11).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen ‘828’ with the teaching of Oyama ‘718’, since Oyama ‘718’ recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 8, Chen ‘828’ disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing wherein the information carried in the said handshake message includes connection ID information and connection resource state information.

Oyama '718' disclose wherein the information carried in the said handshake message includes connection ID information and connection resource state information (figure 15, connection establishment) (col.22, lines 1-5 wherein the pre-established signaling QoS is not determined or negotiated during during set of the session) (figure 15, QoS signaling request 5, QoS signaling accept 11).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 9, Chen '828' discloses wherein step B a local bearer network resource manager interacting with a peer bearer network resource manager through a plurality of intermediate bearer network resource managers, and the intermediate bearer network resource managers only taking charge in message transfer ([0045] negotiating SLA between two end peer (service domains)).

Regarding to claim 10, Chen '828' disclose a bearer network resource manager that finally receives the QoS information managing and controlling resources of a connection

node under its control according to the received QoS information ([0045] negotiating SLA between two end peer (service domains)).

Regarding to claim 11, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing a local bearer network resource manager sending a QoS resource control message that carries the QoS information to connection nodes under its control as well as to a peer bearer network resource manager; B2. the peer bearer network resource manager sending a QoS resource control policy to the connection node according to the QoS resource control message; B3. after receiving [[said]] the QoS resource control policy, the connection node returning a response of the QoS resource control policy to the said peer bearer network resource manager; and B4. the peer bearer network resource manager returning a response of the QoS resource control message to the local bearer network resource manager

Oyama '718' disclose a local bearer network resource manager sending a QoS resource control message that carries the QoS information to connection nodes under its control as well as to a peer bearer network resource manager; B2. the peer bearer network resource manager sending a QoS resource control policy to the connection

node according to the QoS resource control message; B3. after receiving [[said]] the QoS resource control policy, the connection node returning a response of the QoS resource control policy to the said peer bearer network resource manager; and B4. the peer bearer network resource manager returning a response of the QoS resource control message to the local bearer network resource manager (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 12, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing wherein the said QoS resource control message in step B1 includes QoS resource request information, which carries connection identification, stream information, QoS parameters or a stream descriptor.

Oyama '718' disclose wherein the said QoS resource control message in step B1 includes QoS resource request information, which carries connection identification,

stream information, QoS parameters [[and]] or a stream descriptor (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 13, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing wherein the QoS resource control message in step B1 includes a QoS resource release request, which carries a connection identifier or a reason code.

Oyama '718' disclose wherein the QoS resource control message in step B1 includes a QoS resource release request, which carries a connection identifier or a reason code (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling

QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 14, Chen ‘828’ disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen ‘828' are silent to disclosing wherein the QoS resource control message in step B 1 includes a QoS resource modify request, which carries a connection identifier and modified parameter information corresponding to the QoS connection .

Oyama ‘718’ disclose wherein the QoS resource control message in step B 1 includes a QoS resource modify request, which carries a connection identifier and modified parameter information corresponding to the QoS connection (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen ‘828’ with the teaching of Oyama ‘718’, since Oyama ‘718’ recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 15, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing after receiving the response from the connection node, the peer bearer network resource manager checking resource consistency of the created QoS connection; and returning a response of the connection status inquiry message to the local bearer network.resource manager according to a result of the checking step.

Oyama '718' disclose after receiving the response from the connection node, the peer bearer network resource manager checking resource consistency of the created QoS connection; and returning a response of the connection status inquiry message to the local bearer network.resource manager according to a result of the checking step (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 16, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing wherein the information carried in the response of the connection status inquiry message includes any one or more of the following: a connection identifier, stream information, QoS parameters, a stream descriptor.

Oyama '718' disclose wherein the information carried in the response of the connection status inquiry message includes any one or more of the following: a connection identifier, stream information, QoS parameters, a stream descriptor (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 17, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer

network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen ‘828' are silent to disclosing data consistency information

Oyama ‘718’ disclose data consistency information (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen ‘828’ with the teaching of Oyama ‘718’, since Oyama ‘718’ recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 18, Chen ‘828’ disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen ‘828' are silent to disclosing the data consistency information comprises a parameter global path maximum transmission unit, a global label stack depth, an intra-domain label stack depth and a stream description.

Oyama ‘718’ disclose the data consistency information comprises a parameter global path maximum transmission unit, a global label stack depth, an intra-domain

label stack depth and a stream description (figure 15, QoS signaling request, QoS signaling response).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

Regarding to claim 19, Chen '828' disclose exchanging and negotiating QoS information ([0045] negotiating SLA between two end peer (service domains)) , which the communication network provides during data transmission, among the bearer network resource managers (figure 2, SLA based policy controls) through the said QoS connection.

However, Chen '828' are silent to disclosing the connection node includes router

Oyama '718' disclose the connection node includes router (figure 1, The IP network 104 may consist of a number of IP routers).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen '828' with the teaching of Oyama '718', since Oyama '718' recited the motivation in the col. 9, lines 1-5 the pre-established signaling QoS profile before any session are requested QoS. Each nodes may be configured with a standard set of bearer capabilities associated with the signaling QoS profiles.

5. Claims 4, 5, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Chen '828' – Oyama '718') in view of 'QBone Signaling Design Team'.

Regarding to claim 4, the combined system (Chen '828' – Oyama '718') disclose the limitations of claim 3 above.

However, the combined system (Chen '828' – Oyama '718') are silent to disclosing

the peer bearer network resource manager judging whether identity of the local bearer network resource manager is valid, and if valid, executing step A2; otherwise, returning a message of unable to create the OoS connection to the local bearer network resource manager .

'QBone Signaling Design Team' discloses the peer bearer network resource manager judging whether identity of the local bearer network resource manager is valid, and if valid, executing step A2; otherwise, returning a message of unable to create the OoS connection to the local bearer network resource manager (page 16, bandwidth broker makes a number of decisions at this point, including the following: whether the requester is authorized for this service)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Chen '828' - Oyama '718') with the teaching of 'QBone Signaling Design Team', since 'QBone Signaling Design Team'

recited the motivation in page 2 which defining a model of the “bandwidth broker” resource managers to be deployed in the QBone.

Regarding to claim 5, Regarding to claim 4, the combined system (Chen ‘828’ – Oyama ‘718’) disclose the limitations of claim 3 above.

However, the combined system (Chen ‘828’ – Oyama ‘718’) are silent to disclosing

establish connection request comprises_identification information and authentication information of the local bearer network resource manager initiating the establish connection request.

‘QBone Signaling Design Team’ discloses establish connection request comprises_identification information and authentication information of the local bearer network resource manager initiating the establish connection request (page 16, bandwidth broker makes a number of decisions at this point, including the following: whether the requester is authorized for this service)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Chen ‘828’ - Oyama ‘718’) with the teaching of ‘QBone Signaling Design Team’, since ‘QBone Signaling Design Team’ recited the motivation in page 2 which defining a model of the “bandwidth broker” resource managers to be deployed in the QBone.

Regarding to claim 20, the combined system (Chen '828' – Oyama '718') disclose the limitations of claim 3 above.

However, the combined system (Chen '828' – Oyama '718') are silent to disclosing wherein the respective bearer network resource manager includes a bandwidth broker, a call agent, or a connection manager

'QBone Signaling Design Team' discloses wherein the respective bearer network resource manager includes a bandwidth broker (page 16, bandwidth broker makes a number of decisions at this point, including the following: whether the requester is authorized for this service)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Chen '828' - Oyama '718') with the teaching of 'QBone Signaling Design Team', since 'QBone Signaling Design Team' recited the motivation in page 2 which defining a model of the "bandwidth broker" resource managers to be deployed in the QBone.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Chen '828' – Oyama '718') in view of Suomi (Pub. No.: 2005/0007981 A1).

Regarding to claim 7, the combined system (Chen '828' – Oyama '718' discloses the limitations of claim 6 above.

However, the combined system (Chen '828' – Oyama '718') are silent to disclosing creating a local Keep Active (K.A) timer at the local bearer network resource manager,

and creating a peer Keep Active (KA) time at the peer bearer network resource manager; A32. when the local ICA timer is timeout, the local bearer network resource manager adding 1 to timeout times of the local KA timer and sending a further handshake message to peer bearer network resource manager; (figure 6, handskahe, timer, QoS)

A33. after receiving the further handshake message, the peer bearer network resource manager restarting the peer KA timer and returning a handshake response to the local bearer network resource manager; and A34. the local bearer network resource manager determining the connection status according to the timeout times of the local KA timer, the peer bearer network resource manager determining the connection status according to whether the peer KA timer is timeout. ([0045], handshake, timer , QoS, status connection)

Suomi '981' , figure 6, disclose creating a local Keep Active (K.A) timer at the local bearer network resource manager, and creating a peer Keep Active (KA) time at the peer bearer network resource manager; A32. when the local ICA timer is timeout, the local bearer network resource manager adding 1 to timeout times of the local KA timer and sending a further handshake message to peer bearer network resource manager;

A33. after receiving the further handshake message, the peer bearer network resource manager restarting the peer KA timer and returning a handshake response to the local bearer network resource manager; and A34. the local bearer network resource manager determining the connection status according to the timeout times of the local KA timer,

the peer bearer network resource manager determining the connection status according to whether the peer KA timer is timeout ([0045], handshake, timer).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Chen '828' – Oyama '718') with Suomi '981', since Suomi '981' recited the motivation in [0020] which is time long enough that no significant break in data transfer is likely nor is PDP context deactivation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571)272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EDAN ORGAD can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/01/08

/Daniel J. Ryman/
Supervisory Patent Examiner, Art Unit 2619